### **CHAPTER 3**

#### **METHODOLOGY**

### 3.1 Introduction

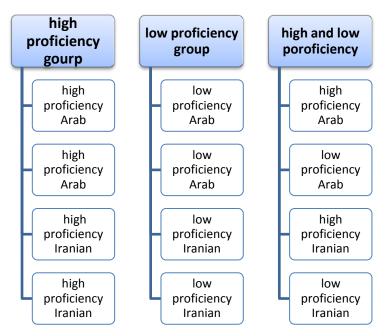
This research aims to study the CSs used by adult postgraduate students in the University of Malaya. In this respect, this chapter provides detailed information regarding the procedures followed in this study. The selection of subjects, the instruments used, as well as the taxonomy employed for data analysis will be discussed.

### 3.2 Selection of the Participants

As shown in the chart below 12 subjects of different ethnic groups (Arab and Iranian) having high and low English proficiency were selected. These subjects were divided into three groups with different proficiency levels. Each group consisted of four subjects according to the English proficiency of subjects. The proficiency level of the participants was determined according to their IELTS degree. The subjects were placed in each proficiency group as follows:-

- 1. high proficiency group two high proficiency Arabs and two high proficiency Iranians.
- 2. low proficiency group two low proficiency Arabs and two low proficiency Iranians.
- 3. high and low (mixed) proficiency one high proficiency Arab, one high proficiency Iranian, one low proficiency Arab and one low proficiency Iranian.

Table 3.1 Distribution of Subjects in Different Proficiency Groups



# 3.2.1 Background of the Participants

The participants were adult Arab and Iranian postgraduate students in the University of Malaya (UM) in Malaysia. These participants were from the Faculty of Languages and Linguistics, Faculty of Education and Faculty of Computer Science and Information Technology. All the subjects had IELTS degree. According to IELTS scoring system, those holding IETLS band 5.5 – 6 are considered Low Advanced and those holding IELTS band 7.5 – 9 are considered Upper Advanced. The participants in this study were placed in groups according to their IELTS scores. The details are shown in Table 3.2. Selected participants used L1 (Arabic for Arab participants and Persian (Farsi) for Iranian participants) at home while they used L2 (English) when communicating with their lecturers, university staff and members other than their ethnic group. It should be pointed out that as the majority (99.4%) of Iranians are Muslims (Pew Forum on Religion & Public Life, 2009) therefore the Persian language has adopted a number of Arabic cognates. In Iranian schools Arabic is taught as a subject from grade six. Moreover, Arabic and Persian share the same alphabet, although Persian has four additional letters. The participants of this study have stayed in Malaysia for at least 12

months (see Table 3.2). They also have passed the Bahasa Malaysia (national language of Malaysia) course offered by the University of Malaya. Therefore, they are familiar with Bahasa Malaysia.

Table 3.2 Description of Participants & their IELTS Score

Name	Ethnicity	University Program	Faculty	Proficiency group	IELTS band	Stay in Malaysia
МО	Iranian	Ph.D.	Languages& Linguistics	High	7.5	12 months
E	Iranian	Ph.D.	Languages& Linguistics	High	7.5	12 months
F	Arab	Ph.D.	Education	High	7.5	24 months
AO	Arab	M.A.	Languages& Linguistics	High	7.5	24 months
D	Iranian	M.S.	Computer Sciences	Low	5.5	24 months
N	Iranian	M.S	Engineering	Low	6	18 months
AB	Arab	Ph.D.	Computer Sciences	Low	6	46 months
MU	Arab	M.S	Computer Sciences	Low	5.5	24 months
V	Iranian	Ph.D.	Education	High	7.5	24 months
K	Iranian	Ph.D.	Science	Low	6	12 months
S	Arab	Ph.D.	Language& Linguistics	High	7.5	52 months
AA	Arab	M.S.	Computer Sciences	Low	5.5	30 months

### **3.3** Selection of the Task

The subjects were given topics to be discussed so as to produce conversations which were recorded. Six different topics were selected (see Table 3.3). Similar topics concentrating on comparing educational and social issues such as teaching and learning problems as well as life in Malaysia and their home country were given to the three proficiency groups. The rationale for using selected topics was to determine the reaction of students with different proficiencies to the same topic (see similar research Ismail 2004; Chong 2004; Abdullah 2004; Chacko 2005 and Hoon 2004 in which similar tasks or topics were given to different proficiency levels).

Table 3.3 The Selected Discussion Topics for this Study

	Topics			
1	How is life in Malaysia and how do you communicate?			
2	Talk about shopping in Malaysia.			
3	Compare schooling system in Malaysia and your country.			
4	Compare teaching in Malaysia and your country.			
5	Compare teachers in Malaysia and your country.			
6	What problems do you have with your supervisors or lecturers and what do you expect from them?			

#### 3.4 Data Collection

The data for this study has been collected by implementing the following steps:-

### 3.4.1 Procedure of Data Collection

In order to collect the data, participants were selected randomly among those who had IELTS degree and had volunteered to participate in the study. To record the conversations the researcher provided a microphone which was placed on a coffee table in the researcher's living room and was connected to her computer. The conversations were recorded by using recording software (GoldWave Digital Audio Editor) which had been installed in the computer. To provide a natural setting and to reduce anxiety during conversations, the participants were served with drinks, fruits and sweets.

### 3.4.2 Recording of the Data

Six similar topics focusing on the comparison of educational and social issues such as teaching and learning problems as well as life in Malaysia and their home country were selected for this study (see Table 3.3). The selected topics were read to the participants.

After completing a conversation on each topic, the participants were provided the next

topic to discuss. Subjects were audio-taped and simultaneously observed while communicating in English in the researcher's home. Each group was recorded for approximately two hours. The researcher was present for the collection of the data and was a non-participant observer. She took notes regarding the participants' behaviour during the conversation, controlled the time, monitored the recording device and read the topics to the participants.

## 3.5 Data Analysis

In this section the procedure and steps followed in order to prepare the data for analysis such as the observation, transcription and the taxonomy used for data analysis as well as the procedure to perform data analysis will be discussed in detail.

### 3.5.1 Transcription

The transcription of the audio-recorded data of the three groups lasting for around six hours was the main corpus of the study (see Appendices E, F & G). The recorded data was transcribed according to the transcription conventions adapted from Jefferson (1984). Utterances were transcribed as closely as possible to the actual conversation produced by the participants. Paralinguistic features such as long pauses, silences, smiles, laughter, fillers were noted. To ensure the accuracy of the transcription the audio-recorded data was played back continuously.

### 3.5.2 Taxonomy Used for Data Analysis

The data was analysed according the taxonomy of CSs by Dornyei and Scott (1997). Some modifications were made to this taxonomy. In this study the two major categories 'direct strategies' and 'interactional strategies' based on Dornyei and Scott's (1997) taxonomy of CSs were selected to be used for data analysis. According to Dornyei and Scott (1997, p. 198) indirect strategies are neither meaning related nor problem-solving devices and therefore will not be included in this analysis. This study focuses only on

problem-orientedness (see 2.3.1), which concentrates on the speakers' motives to use CSs; furthermore the 'indirect strategies' include pauses and fillers that are also used by native speakers of a language in their communication.

Message reduction is "reducing the message by avoiding certain language structures or topics considered problematic languagewise or by leaving out some intended elements of a lack of linguistic resources" (Dornyei & Scott 1997, p.188); and message replacement is "substituting the original message with a new one because one is not feeling capable of executing it" (Dornyei & Scott 1997, p.188). Based on the definitions of 'message reduction' and 'message replacement' they both indicate *avoiding and substituting* message when facing problems. Moreover, restructuring is "abandoning the execution of a verbal plan because of language difficulties, leaving the utterance unfinished, and communicating the intended message according to an alternative plan (Dornyei & Scott 1997, p.189). This definition also indicates *abandoning the intended message and leaving the message unfinished* which is similar to the definition of 'message reduction'. In this respect, another modification is that, among the direct CSs, 'message replacement' and 'restructuring' in Dornyei and Scott's (1997) taxonomy were categorized under 'message reduction'.

Moreover, 'retrieval', "an attempt to retrieve a lexical item saying a series of incomplete or wrong forms or structures before reaching the optimal form" (Dornyei & Scott 1997, p. 189) was seen as 'self-repair' which has been defined as "Making self-initiated corrections in one's own speech." (Dornyei & Scott 1997, p. 189) in Dornyei and Scott's (1997) taxonomy. The rationale for this modification is that based on the definition given by Dornyei and Scott (1997) 'retrieval' is a type of 'self-repair'. Finally, in this modified taxonomy, 'response' includes Dornyei and Scott's (1997) categories of 'response repeat', 'response rephrase', 'response expand', 'response

confirm' and 'response reject' as sub-categories of 'other-performance strategies'. The rationale for the modification in the current study is that, the classification of Dornyei and Scott' (1997) taxonomy (see p. 16) requires the identification and analysis of every response in the conversation separately and this is beyond the objectives of the current research. Table 3.4 shows the taxonomy used for data analysis in this study:-

Table 3.4 Taxonomy of Communication Strategies Used for this Study

DIRECT STRATEGIES	INTERACTIONAL STRATEGIES		
A. Resource deficit-related strategies  Message abandonment  Message reduction (topic avoidance)  Circumlocution  Approximation  Use of all-purpose words  Word coinage  Literal translation (transfer)  Foreignizing	INTERACTIONAL STRATEGIES  A. Resource deficit-related strategies  Direct appeal for help Indirect appeal for help B. Own-performance problem-related strategies  Comprehension check Own-accuracy check C. Other-performance problem-related strategies  Asking for repetition Asking for clarification		
<ul> <li>Code switching (language switch)</li> <li>Use of similar sounding words</li> <li>Mumbling</li> <li>Omission</li> <li>B. Own performance problem-related strategies</li> <li>Self-repair</li> <li>Self-rephrasing</li> <li>C. Other-performance problem-related strategies</li> <li>Other-repair</li> </ul>	<ul> <li>Asking for confirmation</li> <li>Guessing</li> <li>Expressing non-understanding</li> <li>Interpretive summary</li> <li>Responses</li> </ul>		

# 3.5.3 Procedure of Data Analysis

The CSs used by the participants were identified. The CSs were then classified and categorized according to the taxonomy in Table 3.4. The frequency of the occurrences of each type of the CSs was calculated by using a simple frequency count of percentage. In other words the number of times a participant used a single CS in each proficiency group was multiplied by 100 and then divided by the sum total of the CSs used by that group. In order to compare the CSs used by the high proficiency participants of the high-low group with the CSs used in the high-high group, the percentage of CSs used by the high proficiency participants in the high-low group was calculated based on the sum total of the CSs high proficiency participants in this group used. Similarly in order to compare the CSs used by low proficiency participants in the high-low group with the

CSs used in the low-low group, the percentage of CSs used by low proficiency participants in the high-low group was determined based on the sum total of the CSs used by the low proficiency participants in this group.

In order to distinguish the relationship between language proficiency and type(s) of CSs used, the percentages of CSs used by the three proficiency groups (high-high, high-low and low-low) were analysed by using SPSS software. T-tests were employed to determine significant differences in the CSs used with participants of differing levels of proficiency (see 4.5.1). Moreover, correlation coefficients were used to verify the relationship between the use of CSs and English proficiency levels (4.5.2).

The data analysis follows the order the CSs appeared in the taxonomy of the CSs used for this study (Table 3.4). In other words, the data is not analysed based on the most frequently used CSs (see Chapter Four).

#### 3.5.4 Observation

Through observation it was realized that some participants had a much more active role than the others and they had longer turns in conversations than the other members of the group. This would possibly affect the number of CSs produced by that particular participant. Moreover, the more active the participant is the more CSs could be employed. On the other hand some participants were the least active members of the group which would probably result in the employment of fewer CSs. However, in this study language production of participants is analyzed in a group and not individually.

## 3.6 Summary

This study intends to identify the frequency and type of CSs used by adult postgraduate students communicating with each other in a natural setting outside the classroom. The theoretical framework in this study is based on a modified form of the taxonomy for CSs by Dornyei and Scott (1997) presented earlier in 3.5.2 (see Table 3.4). With the aim

of eliciting the data, the participants in different groups were given the same topics for their conversations (see Table 3.3). The conversation sessions were recorded and observed by the researcher and the audio-recorded data was transcribed and then analyzed based on the modified taxonomy (see 3.5.2). The type and number of CSs used were analysed from the transcripts of the recordings lasting 6 hours and involving 12 students having differing levels of proficiency. In the next chapter the results of the data collected will be presented and the findings will be discussed.